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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,359	12/03/2003	Frank Richter	PO-7909/LeA 36,426	7157
157	7590	05/17/2006		
BAYER MATERIAL SCIENCE LLC 100 BAYER ROAD PITTSBURGH, PA 15205			EXAMINER SERGENT, RABON A	
			ART UNIT	PAPER NUMBER
			1711	
DATE MAILED: 05/17/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/726,359

Applicant(s)

RICHTER ET AL.

Examiner

Rabon Sergent

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1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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1. Claims 1-5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants' amendment to claim 1 introduces new matter into the claim in that applicants have failed to provide support for polyisocyanates having a uretdione group content of greater than 50%, absent a conditional statement that the percent value is based upon structures resulting from oligomerization. Currently, the language of claim 1 is interpreted to mean that 50 mole percent of the polyisocyanate constitutes uretdione groups; however, this interpretation is not supported by the specification.

Applicants' amendment to claim 2, stating that step b) is "separating the active catalyst from any residual, unreacted monomer from the reaction mixture", is not supported by the specification.

2. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, with respect to claim 1, applicants have failed to set forth a basis for the claimed 50 mol% value; therefore, the exact meaning of the language cannot be determined. It cannot be determined if the language is based upon the moles of the polyisocyanate or some other entity.

Secondly, with respect to claim 2, the language of step b), "separating the active catalyst from any residual, unreacted monomer from the reaction mixture", is confusing, because it is

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unclear what is being separated from what. Furthermore, the language, “the steps”, lacks antecedent basis.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Laas et al. ('778).

Laas et al. disclose monomer stable uretdiones, suitable for the production of polyurethane coatings, having a residual monomer content below that claimed, wherein the uretdione is produced by reacting a diisocyanate at room temperature in the presence of tributylphosphine. See abstract; columns 2 and 3; column 6, lines 50+; column 7, lines 44+; and, especially, example 9. Given that the same reactants, catalyst, and process conditions of the claims are disclosed by the reference and that the reference provides for oligomerization levels up to 60% and removal of unreacted isocyanate, the position is taken that the polyisocyanate products of the reference inherently possess applicants' claimed quantity of uretdione groups and inherently possess applicants' claimed residual monomer stability. The argument that the reference inherently possesses the claimed residual monomer stability is bolstered by the reference's disclosed use of stabilizers. In other words, it is logical to conclude that a composition that specifically recites stabilizers is more prone to residual monomer stability than compositions that lack such stabilizers.

5. Applicants' arguments that the stabilizers of the reference are excluded by the amended language, “consisting essentially of”, and that the process therefore differs from applicants'

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process are not well taken, because the amended language pertains only to the steps of reacting and separating; it is not seen that the language, as claimed, pertains to components that may be present during such steps, and it is further noted that the reference provides for the stabilizers being present during the step of "reacting" (see column 4, lines 1 and 2). Additionally, even if one assumes that the amended language limits the components, it is noted that applicants' own specification provides for the use of stabilizers and that applicants have not definitively established that the argued stabilizers have a material effect on the composition or process.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

R. Sergent  
May 12, 2006

  
**RABON SERGENT**  
**PRIMARY EXAMINER**